



Electrical grid: Optimisation thanks to the

deployment of renewable energy forecasts

Feed-in management: Real time data and

compensation energy costs thanks to highly precise portfolio forecasts (neuronal networks)

Marketing in compliance with the German

Renewable Energies Act (EEG) – optimisation of

the EEG allocation account thanks to improved

0&M optimisation – thanks to user enhanced

Direct marketing: Minimisation of

monitoring

deactivation forecasts

performance forecasts

and weather data based overhead power line



INTEGRATION OF FLUCTUATING RENEWABLE ENERGY INTO THE **ELECTRICAL POWER** GRID



NTICIPATION OF PART OF FEED-IN MANAGEMENT



FORECASTS FOR ELECTRICITY GENERATED FROM RENEWABLE ENERGY WITHIN DIRECT MARKETING ACTIVITIES & TRADING

PLANNING SAFE MAINTENANCE AND



RENEWABLE ENERGY

- · Highly precise wind, solar and hydropower forecasts
- One-of-a-kind feed-in management solutions
- Long-term feed-in comparisons for wind and solar
- Long-term MCP corrections of wind measurements



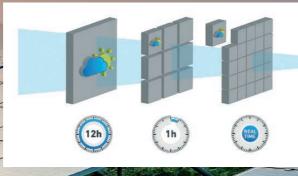
WEATHER COCKPIT®

- Highly flexible online representation of weather information
- Live weather data (satellite and radar images, lightning, station data)
- Highly precise weather forecasts for regions and locations
- Hub height wind information
- Customisable work schedule calendar
- Renewable energy and feed-in management forecasts
- Storm and lightning warnings



data preparation in the Weather Cockpit® Grid development plan: Optimum planning basis thanks to comparable long-time series

Precise location and cost effectiveness planning thanks to wind potential analyses



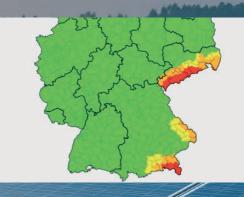
SERVICING WORK

TAKING INTO ACCOUNT OF

RENEWABLE ENERGY **EXPANSIONS IN THE GRID DEVELOPMENT** PLAN

WEATHER DATA

- Long-term meteorological energy re-analysis data covering many years
- Highly precise weather forecasts (model output statistics)
- Wind, global radiation, precipitation
- · High resolution weather analyses in real time (HYDRA)
- · Dedicated, highly precise short-term weather model (RACE)



STORM WARNINGS AND ALARMS

- Our own severe weather centre will keep you informed 24 hours day, 365 days a year
- Provided by experienced storm meteorologists
- · With individual threshold values
- · Warnings cover all types of storms, sleet, thunderstorms, heavy rain, snowfall
- ISO-certified transmission via e-mail, SMS and the Weather Cockpit®

